ACCESSION #: 9904070062

NON-PUBLIC?: N

LICENSEE EVENT REPORT (LER)

FACILITY NAME: Vogtle Electric Generating Plant-Unit 2 PAGE: 1 OF 4

DOCKET NUMBER: 05000425

TITLE: REACTOR TRIP WHEN INSTALLING CLEARANCES IN WRONG UNIT

EVENT DATE: 03/21/1999 LER #: 1999-001-00 REPORT DATE: 03/31/1999

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION:

50.73(A)(2)(iv)

LICENSEE CONTACT FOR THIS LER:

NAME: Mehdi Sheibani TELEPHONE: (706) 826-3209

Nuclear Safety and Compliance

COMPONENT FAILURE DESCRIPTION:

CAUSE: SYSTEM: COMPONENT: MANUFACTURER:

REPORTABLE NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On March 2, 1999, two plant equipment operators (PEOs) were given a clearance package to install Unit 1 clearances in support of the ongoing Unit 1 refueling outage. The PEOs went to the control room and witnessed the reactor operator place the required tags on the handswitches. Next, they went to level A of the control building and pulled fuses in Unit 1 panels. Finally, they proceeded to level 2, intending to enter into the cable spreading room above the Unit 1 control room. However, they instead went into the adjacent cable spreading room above the Unit 2 control room. The clearance required

main feedwater isolation valve (MFIV) fuses to be pulled from cabinet 1BCPT20. The PEOs located the identical Unit 2 panel, 2BCPT20, and pulled the loop 3 MFIV fuses, allowing the MFIV to close. In the Unit 2 control room, personnel received steam/feed flow mismatch alarms and noticed steam generator (SG) level decreasing with low feed flow. Due to the loss of feedwater flow to SG #3, the unit shift supervisor (USS) ordered a manual reactor trip, which occurred at 0206 EST. A normal trip response occurred with the unit stabilizing in Mode 3 (hot standby).

The direct cause of the reactor trip was personnel erroneously pulling the MFIV control power fuses in the wrong unit. The root cause of the error is attributed to inappropriate work practices. Various corrective actions addressing human performance are being implemented.

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) because an unplanned reactor trip occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 2 was operating in Mode 1 (power operations) at 100 percent of rated thermal power. Other than that described herein, there was no inoperable equipment that contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On March 2, 1999, two plant equipment operators (PEOs) were given a clearance package to install Unit 1 clearances in support of the ongoing Unit 1 refueling outage. They were instructed during a pre-job briefing to utilize a dual concurrent verification approach to ensure correct equipment location, identification and tagging. The PEOs went to the Unit 1 control room and witnessed the reactor operator place the required tags on handswitches. Next, they went to level A of the control building

and pulled fuses in Unit 1 panels. Finally, they proceeded to level 2, intending to enter into the cable spreading room above the Unit 1 control room. However, they instead went into the adjacent cable spreading room above the Unit 2 control room. The clearance required main feedwater isolation valve (MFIV) fuses to be pulled from cabinet 1BCPT20. The PEOs located the identical Unit 2 panel, 2BCPT20, and pulled the loop 3 MFIV fuses, causing the MFIV to close. At this point, self verification and dual concurrent verification had failed. The PEOs had concurrently verified that they were at cabinet BCPT20, but failed to ensure they were at the Unit 1 cabinet 1BCPT20.

In the Unit 2 control room, personnel received steam/feed flow mismatch alarms and noticed steam generator (SG) level decreasing with low feed flow. Operators attempted to manually increase feed flow with main feed regulating valve 43, and noticed MFIV #3 was closed. Due to the loss of feedwater flow to SG #3, the unit shift supervisor (USS) ordered a manual reactor trip, which occurred at 0206 EST. The remainder of the main feedwater system isolated and the auxiliary feedwater system actuated, as designed. Control room personnel responded appropriately to maintain adequate SG water levels. A normal trip response occurred with the unit stabilizing in Mode 3 (hot standby). The NRC Operations Center was notified of this event at 0432 EST.

D. CAUSE OF EVENT

The direct cause of the reactor trip was personnel erroneously pulling the MFIV control power fuses in the wrong unit. There were no unusual characteristics of the work location that contributed to the occurrence of this event by the Southern Nuclear Operating Company personnel involved. The root cause of the error was attributed to inappropriate work practices due to the following factors:

1) The PEOs did not verbalize the complete unit designator, as required by the plant's verification policy procedure, when attempting to locate cabinet 1BCPT20. After successfully performing the initial steps of the clearance points, the PEO's self-checking techniques were not carried over into successfully locating the Unit 1 Train B termination cabinet.

2) Expected behavior for dual concurrent verification of critical work activities was not sufficiently implemented by the PEOs nor reinforced by the supervisor.

E. ANALYSIS OF EVENT

When control room operators manually tripped the reactor, main feedwater isolated and auxiliary feedwater (AFW) actuated, as designed. Operators responded properly to throttle AFW and control steam generator water levels. A normal trip response ensued until stable unit operation was achieved in mode 3 (hot standby). Based on these considerations, there was no adverse affect on plant safety or on the health and safety of the public as a result of this event.

F. CORRECTIVE ACTIONS

1) The PEOs were placed on limited duties the following shift and they were evaluated on performance of specific tasks.

2) Plant-wide briefings are being performed by senior plant management on human performance problems and the needed improvement in work practices. These briefings will be completed by April 15, 1999.

3) The need for improvement in addressing human performance deficiencies has been highlighted by this event. Greater management focus will be placed on changes needed to identify root cause of errors and to initiate changes to prevent recurrence. This will include increasing oversight of field activities by first-line supervisors.

G. ADDITIONAL INFORMATION

1) Failed Components:

None

2) Previous Similar Events:

None

3) Energy Industry Identification System Code:

Main Feedwater System - SJ

Auxiliary Feedwater System - BA

Main Steam System - SB

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LCV-1335

March 31, 1999

Docket No. 50-425

U.S. Nuclear Regulatory Commission

ATTN: Document Control Desk

Washington, D.C. 20555

Ladies and Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT

LICENSEE EVENT REPORT 2-99-001

REACTOR TRIP WHEN INSTALLING CLEARANCES

IN WRONG UNIT

In accordance with the requirements of 10 CFR 5 0.73, Southern Nuclear Operating Company hereby submits a Vogtle Electric Generating Plant licensee event report for an event that occurred on Unit 2 on March 2, 1999.

Sincerely,

J.B. Beasley Jr.

JBB/BHW/gmb

Enclosure: LER 2-99-001

xc: Southern Nuclear Operating Company

Mr. J.T. Gasser

Mr. M. Sheibani

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*** END OF DOCUMENT ***